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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/667,334

09/23/2003

Katsuhiko Sasaki

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12/10/2008

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ALEXANDRIA, VA 22314

EXAMINER

DAILEY, THOMAS J

ART UNIT

PAPER NUMBER

2452

NOTIFICATION DATE

DELIVERY MODE

12/10/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/667,334	<b>Applicant(s)</b> SASAKI, KATSUHIKO	
	<b>Examiner</b> Thomas J. Dailey	<b>Art Unit</b> 2452	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 August 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-17,19-24,34 and 36-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-17, 19-24, 34, and 36-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

1. Claims 1, 3-17, 19-24, 34, and 36-42 are pending.

***Response to Arguments***

2. The specification objection and the 35 U.S.C 112 first and second paragraph rejections directed at claims 1, 3-17, 19-24, 34, and 36-42 have been withdrawn in view of the applicant's file amendments and arguments.
3. Applicant's arguments with respect to the prior art rejections of the claims have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
5. Claims 1, 3-6, 8-13, 15-17, 19-24, 34, 36-39 and 41-42 rejected under 35 U.S.C. 103(a) as being unpatentable over Yanagawa (US Pat. 7,148,979) and further in view of Schroath et al (US Pat. 6,973,597), hereafter "Schroath," in further view of Taguchi et al (US Pat. 5,682,227), hereafter "Taguchi."

6. As to claim 1, Yanagawa discloses an electronic apparatus, comprising:
- an abnormality detector configured to detect an abnormality when the abnormality occurs in the electronic apparatus (column 6, lines 54-53);
  - an abnormality type determination part configured to determine a type of the abnormality detected by said abnormality detector (column 6, lines 54-63 and column 7, lines 18-24 shows example abnormalities that can be determined), the abnormality type determination part configured to determine the type of abnormality as one of:
    - a first type that cannot be eliminated by a user of the electronic apparatus and that prohibits use of the electronic apparatus (column 7, lines 35-43),
    - a second type that can be eliminated by the user of the electronic apparatus (column 7, lines 18-28), and
    - a third type of abnormality (column 7, line 64-column 8, line 24);
  - an abnormality notification part configured to inform an external apparatus of the abnormality when the type of the abnormality determined by said abnormality type determination part is of the first type, and to inform the external apparatus of the abnormality when the type of abnormality is a repeat occurrence of the second type; and (column 7, lines 50-59 where the printer service depot computer reads on the external apparatus).

But, Yanagawa does not disclose that the abnormality notification part *automatically* informs the external apparatus. Rather in Yanagawa, the operator

is given a choice as to whether to inform the external apparatus or not (column 7, lines 50-59 and Fig. 6, label S110).

However, Schroath discloses an abnormality notification part configured to automatically inform an external apparatus of an abnormality (column 5, lines 49-52), thus bypassing the need for operator consent before external notification of any abnormality.

Because both Yanagawa, Schroath, and Taguchi disclose methods of detections and notifications of abnormalities, it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute Schroath automatic notification method for Yanagawa's notification with operator consent in order to achieve the predictable result of notifying an external apparatus of an abnormality (which both teachings disclose) so as to eliminate an extraneous step (the pause for operator consent) and decrease the demands placed on the operator.

Further, Yanagawa and Schroath do not explicitly disclose the abnormality type determination part is configured to determine a third type that corresponds to a predetermined function in which the abnormality is detected and that prohibits use of the corresponding predetermined function and the electronic apparatus comprising an abnormality display part configured to display, when the

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type of the abnormality determined by said abnormality type determination part is of the third type, that the abnormality is occurring only when a user request to use the predetermined function is received. Rather, Yanagawa discloses in column 7, line 64-column 8, line 24, three types of abnormalities (Type A, B, and C), but the third type (Type C) does not read on a predetermined function in which the abnormality is detected and that prohibits use of the corresponding predetermined function, but relates to a question by an operator of the electronic apparatus.

However, Taguchi discloses an abnormality type determination part configured to determine an abnormality type that corresponds to a predetermined function in which the abnormality is detected and that prohibits use of the corresponding predetermined function and the electronic apparatus (column 18, lines 53-60, it is determined a mode is unavailable, i.e. in an abnormal state, that function is prohibited; in the example this is two sided printing) comprising an abnormality display part configured to display, when the type of the abnormality determined by said abnormality type determination part is of the third type, that the abnormality is occurring only when a user request to use the predetermined function is received (Fig. 10, label 313 (display part) and column 18, lines 53-65; an error message is displayed on the electronic apparatus if the user selected operation is in an abnormal state).

Therefore, it would have been obvious of ordinary skill in the art at the time of the invention to combine the teachings of Yanagawa and Schroath with Taguchi in order to utilize an additional, known type of abnormality and method of notifying a user of such so as to create an overall more robust and useful system. That is, Taguchi provides for a system which allows the electronic apparatus to operate, but simply prohibits the use of a function in an abnormal state and user's would find such an addition advantageous to the systems of Yanagawa and Schroath.

7. As to claim 10, Yanagawa discloses a remote management system remotely managing a plurality of electronic apparatuses by a management apparatus via a communication line (Abstract), comprising:

- the plurality of electronic apparatuses (column 12, lines 53-56);

- and the management apparatus (column 3, lines 46-51), wherein each of the electronic apparatuses includes:

- an abnormality detector configured to detect an abnormality when the abnormality occurs in the electronic apparatus (column 6, lines 54-53);

- an abnormality type determination part configured to determine a type of the abnormality detected by said abnormality detector (column 6, lines 54-63 and column 7, lines 18-24 shows example abnormalities that can be determined), the abnormality type determination part configured to determine the type of abnormality as one of:

a first type that cannot be eliminated by a user of the electronic apparatus and that prohibits use of the electronic apparatus (column 7, lines 35-43),  
a second type that can be eliminated by the user of the electronic apparatus (column 7, lines 18-28), and  
a third type of abnormality (column 7, line 64-column 8, line 24);  
an abnormality notification part configured to inform an external apparatus of the abnormality when the type of the abnormality determined by said abnormality type determination part is of the first type, and to inform the external apparatus of the abnormality when the type of abnormality is a repeat occurrence of the second type; and (column 7, lines 50-59 where the printer service depot computer reads on the external apparatus).

But, Yanagawa does not disclose that the abnormality notification part *automatically* informs the external apparatus. Rather in Yanagawa, the operator is given a choice as to whether to inform the external apparatus or not (column 7, lines 50-59 and Fig. 6, label S110).

However, Schroath discloses an abnormality notification part configured to automatically inform an external apparatus of an abnormality (column 5, lines 49-52), thus bypassing the need for operator consent before external notification of any abnormality.



Because both Yanagawa, Schroath, and Taguchi disclose methods of detections and notifications of abnormalities, it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute Schroath automatic notification method for Yanagawa's notification with operator consent in order to achieve the predictable result of notifying an external apparatus of an abnormality (which both teachings disclose) so as to eliminate an extraneous step (the pause for operator consent) and decrease the demands placed on the operator.

Further, Yanagawa and Schroath do not explicitly disclose the abnormality type determination part is configured to determine a third type that corresponds to a predetermined function in which the abnormality is detected and that prohibits use of the corresponding predetermined function and the electronic apparatus comprising an abnormality display part configured to display, when the type of the abnormality determined by said abnormality type determination part is of the third type, that the abnormality is occurring only when a user request to use the predetermined function is received. Rather, Yanagawa discloses in column 7, line 64-column 8, line 24, three types of abnormalities (Type A, B, and C), but the third type (Type C) does not read on a predetermined function in which the abnormality is detected and that prohibits use of the corresponding predetermined function, but relates to a question by an operator of the electronic apparatus.

However, Taguchi discloses an abnormality type determination part configured to determine an abnormality type that corresponds to a predetermined function in which the abnormality is detected and that prohibits use of the corresponding predetermined function and the electronic apparatus (column 18, lines 53-60, it is determined a mode is unavailable, i.e. in an abnormal state, that function is prohibited; in the example this is two sided printing) comprising an abnormality display part configured to display, when the type of the abnormality determined by said abnormality type determination part is of the third type, that the abnormality is occurring only when a user request to use the predetermined function is received (Fig. 10, label 313 (display part) and column 18, lines 53-65; an error message is displayed on the electronic apparatus if the user selected operation is in an abnormal state).

Therefore, it would have been obvious of ordinary skill in the art at the time of the invention to combine the teachings of Yanagawa and Schroath with Taguchi in order to utilize an additional, known type of abnormality and method of notifying a user of such so as to create an overall more robust and useful system. That is, Taguchi provides for a system which allows the electronic apparatus to operate, but simply prohibits the use of a function in an abnormal state and user's would find such an addition advantageous to the systems of Yanagawa and Schroath.

8. As to claims 17 and 34, they are rejected by the same rationale set forth in claim 1's rejection.
9. As to claim 3, Yanagawa, Schroath, and Taguchi disclose the invention substantially with regard to the parent claim 1, and further disclose an electronic apparatus further comprising:
  - a non-volatile storage part (Yanagawa, column 13, lines 1-4); and
  - an abnormality history writing part for writing history of the abnormality to said non-volatile storage part when the type of the abnormality determined by the abnormality type determination part represents an abnormality of a fourth type that requires only history saving (Schroath, column 3, line 65-column 4, line 8, if the abnormality only requires history saving nothing further will occur in Schroath's system),
  - wherein the abnormality type determination part is further configured to determine the type of abnormality as one of the first type, the second type, the third type, and the fourth type (Schroath discloses the fourth type (column 3, line 65-column 4, line 8); Yanagawa discloses types one and two (column 7, line 64-column 8, line 4) and Taguchi discloses the third type (column 18, lines 53-60)).

10. As to claim 4, Yanagawa, Schroath, and Taguchi disclose the invention substantially with regard to the parent claim 1, and further disclose an electronic apparatus further comprising:

an abnormality counter for counting the number of times of occurrence of an abnormality (Schroath, column 4, lines 22-24); and

an abnormality counter controller configured to cause said abnormality counter to up count when the type of the abnormality determined by the abnormality type determination part represents an abnormality of the second type that can be eliminated by the user of the electronic apparatus (Schroath, column 5, lines 24-33),

wherein the abnormality notification part includes means for informing the external apparatus of a corresponding abnormality when a count value of the abnormality counter reaches a predetermined value (Schroath, column 5, lines 37-52).

11. As to claim 5, Yanagawa, Schroath, and Taguchi disclose the invention substantially with regard to the parent claim 4, and further disclose means for displaying occurrence of an abnormality when the count value of the abnormality counter has not reached the predetermined value (Schroath, lines 40-44).

12. As to claim 6, Yanagawa, Schroath, and Taguchi disclose the invention substantially with regard to the parent claim 4, and further disclose a reset part

resetting the count value of the abnormality counter when the count value thereof reaches the predetermined value (Schroath, column 5, lines 52-56).

13. As to claim 8, Yanagawa, Schroath, and Taguchi disclose the invention substantially with regard to the parent claim 4, further disclose means for causing the electronic apparatus to reboot when the count value of the abnormality counter has not reached the predetermined value (Schroath, column 5, lines 37-52).

14. As to claim 9, Yanagawa, Schroath, and Taguchi disclose the invention substantially with regard to the parent claim 8, further disclose means for displaying that reboot is to be performed before the electronic apparatus is caused to perform reboot (Schroath, column 3, lines 40-44).

15. As to claims 11, 20, and 37, they are rejected by the same rationale set forth in claim 4's rejection.

16. As to claims 12, 21, and 38, they are rejected by the same rationale set forth in claim 5's rejection.

17. As to claims 13, 22, and 39, they are rejected by the same rationale set forth in claim 6's rejection.

18. As to claims 15, 23, and 41, they are rejected by the same rationale set forth in claim 8's rejection.

19. As to claims 16, 24, and 42, they are rejected by the same rationale set forth in claim 9's rejection.

20. As to claims 19 and 36, they are rejected by the same rationale set forth in claim 3's rejection.

21. Claims 7, 14 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yanagawa, Schroath, and Taguchi as applied to claims 4, 10, and 37 above, and further in view of what was well known in the art at the time of the invention.

22. As to claim 7, Yanagawa, Schroath, and Taguchi disclose the invention substantially with regard to the parent claim 4, and further disclose:

an image forming part forming an image on a recording medium (Schroath, column 3, lines 55-56);

a sheet counter counting the number of sheets each having an image thereon formed by said image forming part (Schroath, column 4, 36-38); and

a reset part for resetting the count value of the abnormality counter (Schroath, column 5, lines 49-56).

But, Yanagawa, Schroath, and Taguchi do not disclose the sheet counter is used to count the number of sheets that used between detection of errors and if it exceeds a certain value resetting the count value of the abnormality.

However, Official Notice is taken (MPEP 2144.01) that this is an obvious modification for one of ordinary skill in the art at the time of the invention to Schroath's disclosed invention. Schroath discloses determining whether an error has occurred more than Y number of times in X number of minutes, where the value of X is a function of usage data of a printer (i.e., a sheet counter) (column 4, lines 22-56). Simply, cutting out the temporal element of Schroath's controlling variable (X minutes) and making it simply a function of raw usage data would have been an obvious design to choice to one of ordinary skill in the art at the time of the invention and could have been done in order to simplify Schroath's system.

23. As to claims 14 and 40, they are rejected by the same rationale set forth in claim 7's rejection.

***Conclusion***

24. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
25. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.
26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Dailey whose telephone number is 571-270-1246. The examiner can normally be reached on Monday thru Friday; 9:00am - 5:00pm.
27. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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28. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. J. D./  
Examiner, Art Unit 2452

/Kenny S Lin/  
Primary Examiner, Art Unit 2452